

REMARKS

The Office Action dated February 27, 2008 indicated that the drawings and claims stand objected to, and listed the following rejections: claims 1-10 stand rejected under 35 U.S.C. § 112(2); claims 1-3 and 9 stand rejected under 35 U.S.C. § 102(b) or under 35 U.S.C. § 103(a) over Akiyama (US Patent Pub. No. 2002/0043699, hereinafter the ‘699 reference); claims 4-8 and 10 stand rejected under 35 U.S.C. § 103(a) over the Akiyama reference in view of William (US Patent No. 5,374,843) and/or Letavic (US Patent No. 6,127,703) or in the alternative, over Letavic in view of the Akiyama and/or William references.

Applicant has included a replacement drawing sheet with this response showing an amendment to FIG. 1. In view of this replacement sheet, Applicant believes that the objections to the drawings have been overcome.

Applicant respectfully declines to add new claim limitations in accordance with the Office Action’s suggestion in reciting an objection to terms in claim 1. Specifically, the Office Action is requiring that new claim limitations be added to introduce a relationship between terms describing first and second conductivity types. Applicant submits that such a relationship is not claimed and is unsure of any rationale behind the Office Action’s suggested change. That is, Applicant submits that claim 1 is clear on its face and in view of the specification (*i.e.*, different conductivity types may exhibit one or more of various relationships).

Applicant traverses the Section 112(2) rejections because the Office Action’s indicated contradiction regarding the claimed field plate is confusing and misplaced. The Office Action references limitations directed to a field plate that includes metallic regions isolated by spaces, and that is connected to a source or a gate. As is consistent with the discussion of one or more example embodiments at paragraph 0015 of the specification, these limitations may apply to the connection of a portion of such a field plate (*e.g.*, region 52a in FIG. 1) to a source region, with distribution of voltage across the remaining portion of the field plate (*e.g.*, 52b in FIG. 1). Applicant would thus understand the Office Action’s discussion of which metallic region is connected to the source or gate as applying to different example embodiments (*e.g.*, under different embodiments, different

metallic regions may be so connected, where the field plate collectively includes all regions). Applicant notes that the claims do not require that the field plate be contiguous.

Applicant respectfully traverses all of the claim rejections because the ‘699 reference, upon which all rejections rely, does not disclose a field plate that forms “a linear lateral electric field distribution” consistent with independent claim 1 (and, accordingly, in claims 2-10 that depend therefrom). Specifically, the cited portions of the ‘699 reference alleged as providing correspondence to the claim limitations involve a field plate that has a gate at both ends and thus cannot affect the claimed linear lateral electric field distribution. Referring to FIG. 2, the field plate (MFP2) is arranged with gate 10 on one end and gate 11a at an opposite end as described at paragraph 0105. In this regard, the voltage at each end is that of the respective gates and does not affect the claimed lateral field. Therefore, the Office Action’s assertion that the conductive regions of the ‘699 reference “naturally form a substantially linear lateral electric field distribution” is contrary to the teachings in the ‘699 reference and the actual operation of the ‘699 reference. The ‘699 reference therefore does not disclose the claimed invention.

Applicant further traverses the Section 102/103 rejections over the ‘699 reference, because the Office Action’s assertion of “selection of a known material” lacks any support from the prior art. That is, the Office Action asserts that one of skill in the art would replace non-metal material in the ‘699 reference with metallic material, without providing any support for doing the same, citing 1945 case law discussing “selection of a known material based on its suitability for its intended use” but failed to provide any evidence showing that the proposed substitution would be suited for the indicated use in the ‘699 reference, and failed to provide any motivation for doing the same. Applicant therefore submits that the Section 102/103 (and all) rejections are further improper and should be removed.

As all of the claim rejections rely upon the teachings in the ‘699 reference, which does not provide correspondence to claim 1 as discussed above, Applicant submits that all claim rejections are improper and should be removed. Applicant has further addressed other issues with the rejections of certain dependent claims in the following.

Regarding the rejection of claims 2 and 3 at page 6, the Office Action has not provided any reference that discloses the claim limitations, and appears to be relying

upon an improper inherency-type argument in rejecting limitations directed to a dielectric layer and a second layer of metallic regions. For instance, the Office Action asserts that “the field plate in Akiyama can further comprise another layer of plural metallic regions” but fails to cite any reference showing such a layer and fails to provide any explanation as to why such a layer would be inherent. Applicant therefore submits that the rejection of claims 2 and 3 is also improper for these reasons.

Regarding the rejection of claims 4-8 and 10, Applicant submits that the rejection is in improper form and confusing. It appears that the Section 103 rejection at page 6 recited two separate rejections, with two different primary references and which would therefore require separate rationale in order to establish a *prima facie* case of obviousness in each case. In this instance, Applicant cannot ascertain how the Office Action has proposed to combine the various cited references, with indicated “and/or” combinations and different primary references. Applicant therefore submits that the rejections are improper and requests that they be removed.

Applicant further traverses the Section 103 rejection of claims 4-8 and 10 in view of the ‘703 reference as a primary reference, insofar as understood, because the rejection has not stated where the ‘703 reference and various secondary references teach or suggest all of the claim limitations. The rejection is stated in its entirety in a single sentence on page 7, without making reference to the claim limitations. Applicant submits that the rejection is therefore improper and requests that the rejection be removed.

New claims 11 and 12 are directed to subject matter relating to the field plate and the distribution of voltage across the field plate relative to respective connectivity to a source region or a gate. Support for these limitations may be found in the various examples described in the specification, including those at paragraph 0015. New claim 13 is directed to subject matter similar to that in claim 1, with limitations relating to the distribution of voltage as in new claims 11 and 12. New claims 14 and 15 depend from claim 13, and include limitations that are similar to those in the original claims and as described, for example, at paragraphs 0014 – 0020. Applicant submits that these claims are allowable over the cited references for the reasons stated above in connection with the claim rejections, and further because the references fail to disclose, teach or suggest the claim limitations directed to the lateral distribution of voltage via the claimed field plate.

In view of the above, Applicant believes that each of the rejections/objections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063.

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Attachment—Replacement Drawing Sheet - 1 page